



State of Louisiana

Department of Environmental Quality



March 2, 2001

M.J. "Mike" Foster
Governor

J. Dale G. Foster
Secretary

BASF Corporation and IMC-Agrico Recognized for Outstanding Nutrient Reduction Achievement

Governor Mike Foster has recognized two Louisiana industries -- **BASF Corporation and IMC-Agrico** -- for making significant voluntary reductions in nutrient discharges to the Mississippi River. Nutrient reductions to the Mississippi River are of special importance because they will also reduce the nutrient load to the Gulf of Mexico. Excessive nutrients in Mississippi River water has been identified as one of the causes of Gulf of Mexico hypoxia - a large area of low oxygen in nearshore Gulf waters off Louisiana's coastline. This area of the Gulf is sometimes referred to as a "dead zone". Low oxygen in Gulf waters off the Louisiana coast threatens the health of our valuable Gulf fisheries for shrimp, fish and other seafoods. It remains for all states along the Mississippi, both upriver and downriver, to further reduce their nutrient discharges into the river in order to protect the Gulf of Mexico.

Outstanding Nutrient Reduction Achievement

BASF Corporation (Geismar)

"...for development of a biological treatment system that converts over 2.3 million pounds of nitrates annually in their wastewater to atmospheric nitrogen, thus reducing discharges to the Mississippi River, and contributing to the reduction of nutrient loading in the Gulf of Mexico."

BASF's Nitrate Discharge Reduction Project converts the BASF Corporation wastewater treatment plant in Geismar to a new mode of operation that allows a specific kind of biological organism to grow. This "anoxic treatment" involves the use of specific bacteria that can only live in wastewater with limited oxygen. BASF installed equipment to establish conditions that allow this type of organism to grow most efficiently and for the nitrate to be removed efficiently. It converts the target nitrate compound to nitrogen gas, a component of the natural air we breathe. The result during 1999 was the conversion of approximately 2.3 million pounds of nitrate to nitrogen gas. Without the conversion, the nitrate would have been otherwise discharged to the Mississippi River.

IMC-Agrico (Uncle Sam and Faustina Plants)

"... for implementing a comprehensive, long range by-product management improvement campaign, providing inactive phosphogypsum stacks with a synthetic liner and a clay/grass cover. This resulted in more than an 80% reduction in average annual nutrient discharges to the Mississippi River, or over 100 million pounds. This contributes significantly to the reduction of nutrient loading in the Gulf of Mexico."

This project cost \$27 million. It used enough clay to cover 900 football fields with one foot of clay and enough grass seed to fill three Greyhound buses. The synthetic liner that was used could have covered I-10 from Baton Rouge to LaPlace and the underdrain pipe would have extended the same distance. The cost to maintain and expand the system over the next 15 years will be \$33 million, bringing the total project cost to \$60 million.

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